JPRS 83627

7 June 1983

Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 274



19980609 127

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

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INFORMATION SERVICE
U.S. DEPARIMENT OF COMMERCE
SPRINGFIELD, VA 22161

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WORLDWIDE REPORT

Telecommunications Policy, Research and Development

No. 274

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TELECOMMUNICATIONS PROBER SAYS TELECOM MUST BE PUBLIC

Canberra THE AUSTRALIAN in English 29 Mar 83 p 7

[Article by Jane Cadzow]

[Text]

THE Australian telecommunications network was likely to become backward by world standards unless Telecom was made a public company, the chairman of the Committee of Inquiry into Telecommunications in Australia, Mr Jim Davidson, said.

He said adoption of his committee's recommendation that Telecom be made a public company wholly owned by the Government would allow development of the Australian network to continue to keep pace with overseas networks.

However, if Telecom remained a statutory authority, government financial constraints would result in a slowing down of the network's development. As a consequence, it would be unable to provide as many specialised services as were available overseas.

Mr Davidson told a meeting of the Institute of Public Affairs NSW branch that Telecom's accountability to the public would increase if it became a public company because the board of the company would be responsible to its shareholders, the Government, for its performance. The

Government would have the power to dismiss the board if its performance was unacceptable.

Now, the chief executive of Telecom was appointed by and answerable to the relevant government minister. He was therefore forced to accept suggestions which might be aimed at political gain rather than the long-term improvement of the telecommunications network.

"The risk of governments using Telecom to achieve some short-term political objective should be minimised," Mr Davidson said. "In our model, the board of directors provide that restraining influence."

However, the main advantage of making Telecom a public company was that as a business enterprise it would have greater freedom to organise its finances, and could price its services at a rate which would ensure enough profits to enable it to meet the future needs of its market.

Since all Telecom's profits were used to improve its services, high profits were in the interests of the people using the network.

Mr Davidson said the fact that Telecom currently showed an annual profit was at least partly a result of its accounting methods, which were based on an annual equipment depreciation rate of just under 5 per cent.

It could be argued that the depreciation rate was closer to 6 or 7 per cent.

"There might be a viable accounting system that showed they didn't make a profit," Mr. Davidson said.

The committee of inquiry's report, known as the Davidson Report, became the subject of heated debate when it was tabled in Federal Parliament late last year. During the federal election campaign the former communications minister, Mr Neil Brown, tried to defuse the controversy by announcing the Liberal government's rejection of the report's key recommendations on pricing policy.

Mr Davidson said he was not bitter that the former government seemed to have used rejection of the recommendations as a vote-winning exercise.

CHANGES IN TV SIGNALS TO ACCOMMODATE FM RADIO STIR DISPUTE

Sydney THE SYDNEY MORNING HERALD in English 1 Apr 83 p 4

[Article by Richard McGregor]

[Text]

CANBERRA. — A major dispute has occurred in the electronic media about proposed changes to the broadcast signal of television stations to make room for the development of FM radio.

The changes could mean the end of channels Four, Five and possibly Three on Australian television sets, and the likely creation of channels 9A and 12.

The conflict between radio and television interests is one of the most important problems faced by the new Minister for Communications, Mr Duffy.

It results from a planning error by a government body in the early 1960s, which allocated to television stations the space on the radio frequency spectrum internationally dedicated to FM (frequency modulation) radio.

The radio frequency spectrum allocates specific frequencies for radio, television and all forms of communications, including satellites and navigation aids.

The complex task of administering the spectrum is carried out by the Department of Communications, which must licence all forms of transmission.

The space, known as Band two on the spectrum — or 88 to 108 megahertz — is occupied by the television channels Four, Five, and a part of Three.

The quick development of FM radio — a distant proposition when television was established in Australia — is now being severely impeded across the country because of a lack of space on the spectrum for new stations, according to the radio industry.

However, the television industry is resisting moves to force it off Band Two without adequate warning or compensation, and says there should be a demonstrated need or new FM stations before there is any change.

The moves will affect about 20 commercial and ABC stations in Australia, but the fugures of NBN3 in Newcastle and WIN4 in Wollongong are especially cucial

for broadcasting planning in Sydney.

Mr James Malone, of the Federation of Australian Commercial Television Stations (FACTS), said that television should also retain the use of channel 3, which is only partly in band two.

He said a loss of channel Three would leave the industry short of broadcasting space, especially with the imminent granting of supplementary licences to commercial stations.

The issue is further complicated by the television industry's demand that it be moved to another section of the VHF (very High Frequency) — where it is now — rather than the UHF (Ultra High Frequency) spectrum.

The UHF signal is more difficult and costly to propagate. The industry also claims it would reduce their market because there is a lack of sets, which can receive the UHF signal.

The Department of Defence occupies an area above channel 11 on the spectrum, hence the move would make room for a channel 12.

AUSSAT STAFFING—Sydney.—Aussat Pty Ltd, the company established by the Federal Government to operate Australia's domestic communications satellites, expected to have more than 300 employees within three years, the Federal Arbitration Commissioner, Mr Bevan Johnson, was told yesterday. Aussat, wholly owned by the Commonwealth, has ordered three satellites. The first two will be launched into orbit over Australia by the United States space shuttle Columbia on July and October 1985. Commissioner Johnson is hearing applications by the Professional Radio and Electronics Institute and the Federated Clerks' Union for award coverage of Aussat employees. The Australian Telecommunications Employees' Association, the Administrative and Clerical Officers' Association and the Australian Public Service (fourth division officers) Association have been given leave to intervene. Commissioner Johnson adjourned the hearing until 10.30 a.m. on April 13 in Sydney. [Text] [Brisbane THE COURIER-MAIL in English 26 Mar 83 p 12]

HEBEI MICROWAVE COMMUNICATIONS--Shijiazhuang, 18 Apr (XINHUA)--A microwave relay communications system was successfully test-operated on 18 April between Shijiazhuang City and Xinle County, Hebei Province. This modern communications system can be used to transmit telephone calls, facsimiles, telegrams, various data and color television. All pieces of equipment in this system were designed and made in China. [Beijing XINHUA Domestic Service in Chinese 1620 GMT 18 Apr 83 OW]

XINJIANG TELEVISION NETWORK--Urumqi, 2 May (XINHUA)--Workers and staff members of the 140 farms and livestock farms under the Xinjiang Production and Construction Corps are now able to watch television. In recent years, a television network has been formed among the farms with the establishment of 26 television recording and relay station. [Summary] [Beijing XINHUA Domestic Service in Chinese 0900 GMT 2 May 83 OW]

RADIO-TELEVISION UNIVERSITY--Wuhan, 16 May (XINHUA)--China will expand its radio-television university to two million students by 1990. This was announced here today by Wang Yishan, acting president of the Central Radio-Television University, at the current national conference on higher education. Wang Yishan said the total student body would be increased from the present 347,000 to 850,000 students and then to two million by 1990. He said that during the past four years, the university had shown itself to be a promising institution, able to reach large segments of China's population. Since its founding in February 1979, the university has had three intakes of nearly 800,000 people, including 360,000 full-time students and nearly 440,000 part-time scholars. [Excerpt] [OW161303 Beijing XINHUA in English 1211 GMT 16 May 83]

SATELLITE SYSTEM RESOLUTION APPROVED--A resolution that would permit the equitable distribution of frequency bands in the new satellite system which will be implemented by the nations of America was approved yesterday during an ITU conference on radiobroadcasting via satellite. Hernando Balduino, the delegate from Brazil and chairman of the conference, which was organized by the Ministry of Transportation and Communications and the Inter-American Telecommunications Conference (ITC), explained that this resolution will permit the use of the same megahertz band by all American countries. Approval of this resolution is the first in a series of steps which will provide standards for the new satellite system to be implemented by all American nations. The technical aspects of the new system will be analyzed later, according to Balduino, who will chair the meetings until next Friday, at which time the closing session will be chaired by Carlos Pestana Zevallos, minister of transportation and communications. Balduino said that another of the conference's objectives is to guarantee rights to the use of geos tationary satellites; i.e., utilization of segments of the orbit and frequency band for radiobroadcasting via satellite. [Text] [Lima EL COMERCIO in Spanish 27 Apr 83 p 3] 8143

ARGENTINA

BRIEFS

SATELLITE GROUND STATION—Buenos Aires, 5 May (TELAM)—The National Telecommunications Company reported here today that the satellite ground station at Chepes, La Rioja, has been incorporated into the national communications system known as Sovereignty Plan [Plan Soberania]. This station has two input and two output lines and a color TV channel which facilitates the access of semi-automatic telephone service to the entire national network. The Chepes ground station is part of a series of 34 stations to be installed throughout the country. [Text] [PY152309 Buenos Aires TELAM in Spanish 1610 GMT 5 May 83]

NEW COMMUNICATIONS FACILITIES INAUGURATED

New Studios in Santa Clara

FL141302 Havana Domestic Service in Spanish 1100 GMT 13 May 83

[Text] Flavio Bravo Pardo, member of the party Central Committee and president of the National Assembly of the People's Government, cut the ribbon which officially inaugurated five modern studios belonging to radio stations CMHW and CMHA in Santa Clara.

The activity took place as part of our top government body's control and assistance program to Villa Clara Province. One of the studios is equipped with high technology equipment for recording stereo with a 10-channel console of Hungarian manufacture.

Repeater Station in Camaguey

PA132145 Havana International Service in Spanish 1800 GMT 13 May 83

[Text] Pedro Guelmes, minister of communications of Cuba, has inaugurated a postal and telegraph center and a broadcasting repeater station in Florida, Camaguey Province, as part of the development of this area in the Year of World Communications proclaimed by the United Nations.

Guelmes presides over the national committee that in this Year of Communications has the mission of carrying out important tasks to improve the national and international exchange of information. Cuba is the first underdeveloped country that designs and produces telecommunications equipment in cooperation with the United Nations.

PERU

BRIEFS

SATELLITE TELEPHONE SERVICE—The Ministry of Transportation and Communications reported yesterday that a total of 12 cities in Peru now have satellite telephone services. The cities are Piura, Chiclayo, Trujillo, Chimbote, Huacho, Huancayo, Iquitos, Arequipa, Ica, Huaraz, Cuzco and Tacna. [Text] [Lima EL COMERCIO in Spanish 3 May 83 p a 8 PY]

DETAILED REVIEW OF METEOROLOGICAL TELECOMMUNICATIONS Castries THE VOICE in English 20 Apr 83 p 7 [Text]

THESE facilities include (a) teleprinters, (b) facsimile, (c) telex, (d) telephone, (e) hot line

- (a) The Meteorological Office at Hewanorra has three teletypes which are used exclusively for dissemination and exchange of meteorological information round the clock and one which is used almost exclusively for air traffic information and also used occasionally for meteorological information.
 - (i) 'ANMET: The word Anmet is an abbreviation of the first two words of the expression Antilles Meteorological Network. St. Lucia along with all the islands of the Eastern Caribbean chain, make up this network which is linked via San Juan, Puerto Rico to the main computer at the World Meteorological Centre in Washington, United States.

The Meteorological Office at Vigie is also linked to the Anmet network and operate independently of the one at Hewanorra. Anmet is used for transmission of local meteorological information as well as reception of information from other centres. The bulk of the information received is in an already processed form.

- (ii) World Met and Carmet: Reception of information on these circuits is via High Frequency Radio (HF) signals. The information, like those received on Anmet is in a coded form but mainly unprocessed. Some information is also received in plain language form. The transmitting station is based in Miami and the frequencies used are published in appropriate World Meteorological Organisation (W.M.O.) publications.
- (iii) AFTN: This abbreviation came from the words, Aeronautical Fixed Telecommunication Network. AFTN is also linked to the main computer in Washington. It is used by Air Traffic Services for dissemination and reception of aeronautical information. Since the International Civil Aviation (I.C.A.O.) and the World Meteorological Organisation work closely in the fields of aviation and meteorology respectively, it was mutually agreed that AFTN should be used by Meteorological Authorities for disseminating meteorological information when meteorological circuits fail or when these are not available.
- (b) Facsimile: Like World Met. and Carmet, facsimile equipment is used only for reception of information by means of H.F. Radio signals. The transmitting stations mainly used are those in the United States i.e. Brentwood, Long Island, New York and Norfolk, Virginia. Another station transmitting from Brackwell in England is sometimes used depending on the area for which the information is required. The information received on facsimile equipment is in a pictorial form and consists among others. synoptic weather, charts, prognostic charts of significant weather, winds and temperature, etc. of upper levels of the atmosphere, radar echo charts, other charts depicting sea conditions and satellite photo charts.

Forecasters depend heavily on satellite photos for the preparation of daily forecasts. Meteorological satellites also form part of the Global Telecommunication System (G.T.S.) but their role will be discussed as a separate subject.

A set of frequencies along with schedules of transmissions are published by the USA and the UK in appropriate W.M.O. Publications.

(c) Telex: After a review of communications performance during Hurricane Allen in 1980, it was strongly felt that facilities needed to be improved for better communications between the Emergency Office and Radio St Lucia. The Standing Subcommittee on Telecommunications of the Central Emergency Organization on Disaster Preparedness and Prevention recommended the installation of a Telex link between the Meteorological Office and the Emergency Operation Centre and Radio St Lucia. Naturally, this recommendation was endorsed by the Central Committee and was immediately implemented.

With this machine it is possible for the Emergency Operations Centre and Radio St Lucia to receive a printed copy of copies of Hurricane bulletins and associated information from the Meteorological Office prior to and during Hurricane conditions. Since the incidence of hurricane is such a rare event it was decided that it would be more feasible to make regular use of the machine by the Meteorological Office and Radio St Lucia for broadcast to the general public instead of using the telephone which was sometimes unreliable.

- (d) Telephone: This, as we all know, is a very important piece of equipment especially for internal and external communications. It provides regular communication between the Meteorological Office and members of the public, government departments, pilots, airline personnel, private organizations and institutions, commercial sector, regional meterological services, regional institutions and organizations concerned with meteorology and others. Thus its importance to the Meteorological Office need not be further emphasized.
- (e) Hot Line: This is a voice link-up of the two Meteorological Offices at Hewanorra and Vigie with the two Control Towers. Each of these four units have a set and anyone can communicate with the other three independently. This service was installed after it was realised that too much load was being put on the telephone. In order to make the flow of information among these units more effective, the Hot-Line was introduced. This link is used only by A.T.C. and Meteorological personnel. Since the installation of this system, the telephone is hardly ever used for information exchange among the four units.

While the existence of these facilities may in the eyes of the layman look like a lot, in the eyes of meteorological personnel they are considered as being short of the basic requirements for a forecasting office. Some of the equipment used are very old and already becoming obsolete. These need to be replaced. Others are themselves reliable but the system used for information exchange is very unreliable due to numerous technical problems. Such a system need to be improved but this will take more than just a local effort. All the Meteorological Authorities in the Eastern Caribbean Region will have to be involved.

There is also need for additional equipment. It is envisaged that some of these will materialize before the end of the year.

TELCO PLANS EXPANSION IN 1983, INCREASING LINES BY 32,000

Port-of-Spain TRINIDAD GUARDIAN in English 27 Apr 83 p 1

[Text]

Commission (PUC), headed by its Chairman, Dr. Selwyn Ryan, is hearing the application.

Mr. Wilson, in reply to one of Telco's counsel, Mr. Frank Solomon, said the installations would take place in varying periods but they should be done by the end of 1983.

Mr. Wilson explained in detail financial figures in the company's statement of case.

At one point vesterday, Mr. Karl

At one point yesterday, Mr. Karl Hudson-Phillips, leading counsel for the Organisation for National Reconstruction (ONR), one of the objectors to the application, complained to the tribunal that the

plained to the tribunal that the proceedings were going too slow.

There was no need for Mr. Wilson to read "line by line" the figures in the statement of case. Mr. Hudson-Phillips said the statement was well documented.

TRINIDAD and Tobago Telephone Company (Telco) has planned to increase the number of lines in

1983 by approximately 32,000.

Mr. Selby Wilson, executive adviser to the Executive Director of the state-owned company, disclosed this when hearing of the application by Telco for permission to increase its rates and charges, resumed at City Hall yesterday.

A tribupal of the Public Utilities

A tribunal of the Public Utilities

AT OWN TEMPO

But Mr. Solomon submitted that Mr. Wilson had the right to give his evidence at his own tempo. He also said that a witness giving evidence in chief would not produce the kindof newspaper headlines which perhaps Mr. Hudson-Phillips wanted.

Replying to another question from Mr. Solomon, Mr. Wilson said infrastructural investment was necessary to give effect to the expansion (of lines) programme.

Mr. Hudson-Phillips also objected to Mr. Wilson's apparent tedious

to Mr. Wilson's apparent tedious exercise of listing the situation with respect to plans for Telco's various exchanges.

He said he was arxious to get on with the cross-examination of Mr.

Wilson.

Mr. Solomon noted that witness should be allowed to amplify the "summary" contained in the statement of case as it related to the exchanges.

Hearing resumes at 2 p.m. today.

ELECTRONICS DEPARTMENT TELLS COMPUTER PLANS

New Delhi PATRIOT in English 25 Apr 83 p 5

[Text] A large computer network called INDONET--which links Bombay, Calcutta, New Delhi, Madras and Hyderabad--to provide interactive facilities and sophisticated software including computer-aided design, is being set up in the country, reports PTI.

Being implemented by the Computer Maintenance Corporation, this prestigious project will offer data processing, large data base and local computing facilities to small and medium scale sections, according to the annual report of the Department of Electronics for 1982-83.

Besides, the INDONET (Integrated National Data Processing and Communication Facility) will provide highly specialised software in the areas of engineering design, structural analysis and management services, which can be shared by professional organisations.

Also, various users in other locations would be able to use the system, through terminals provided for direct access.

One of the major objectives is to provide time to those entrepreneurs who want to operate in the software export area.

It is proposed to provide an international gateway so that access to some of the well-established computer networks and data bank overseas will become available in the country.

The INDONET project—first computer network experiment—will be carried out in two phases, with the first phase costing Rs four crores.

INFORMATION MINISTRY RELEASES 1982-83 ANNUAL REPORT

New Delhi PATRIOT in English 23 Apr 83 p 5

[Text]

The Government says services of the All India Radio were being 'severely eroded because of interferences from broadcasts put out by neighbouring countries', reports PTI.

This is stated in the annual genore of the Information and

This is stated in the annual report of the Information and Broadcasting Ministry for the year 1982-83 released on Friday. The report says that this interference was more in the sensitive north eastern region of the country.

According to the report the Government was taking effective steps by revamping the services of AIR completely to counter these interferences. Highlighting the activities and expansion programmes of the Ministry, the report says that in the current year, it proposed to start four more centres of Doordarshan in Nagpur, Rajkot, Gorakhpur and Ranchi and augment the existing facilities in Hydershad and Cuttack.

Hyderabad and Cuttack.

Outlining the measures to counter the radio erosion threat, the report says that the Government was laying special stress on strengthening the mass media in the north eastern region where the 'vulnerability to propaganda from forei-

gn broadcasting organisation is more severe'.

As part of this programme, the report says that three out of the six AIR stations to be set up during the sixth Plan are to be located in north eastern region, in Itanagar in Aurnachal Pradesh, Tura in Mehgalaya and Diphu in Assam. It adds that under this plan a 10 kw transmitter had already been commissioned in Aizawl and that work had begun on stepping up the capacity of transmitters at Shillong, Dibrugarh and Gauhati.

The report says that AIR had also drawn up plans to start local radio stations and a step in this direction was the foundation stone of such a station being laid at Adilabad in Andhra Pradesh.

The report says the four new Doordarshan stations being set up would have ten kilowatt transmitters with programme production centres. In addition over 2,000 VHF viewing sets would be installed in three iden tified districts in each of the four States of Maharashtra Gujarat, Uttar Pradesh and Bihar within the range of these VHF transmitters.

It says that another 2,000 sets were also being proposed to be set up with direct receptions sets in yet another six places in six States.

The report says that the Nagpur Doordarshan station with an interim one kilowatt service had already started functioning ahead of the schedule and in the course of the year its wattage would be stepped up to 10 kw.

The report says that with the launching of the Indian national satellite and availability of the Posts and Telegraphs microwave links, it had been feasible to start a national programme and the Government was thinking of extending the duration of the programme and making it more viewer-oriented.

The Government, the report adds, was also thinking of making news coverage more visual and including as many as possible regional languages for news broadcasts.

sible regional languages for news broadcasts.

UNI adds: Doordarshan has submitted to the Government a 15-year perspective plan (1985-2000) for taking television to every nook and corner of the country.

SIX MORE RADIO STATIONS PLANNED FOR 1984

Karachi DAWN in English 1 May 83 p 5

[Text]

SARGODHA, April 30: Raja the awakening of consciousness Mohammad Zafarul Haq, Federal and revival of the sense of ac-Minister for Information and countability to the Creator. Broadcasting, said Friday six more short-range radio stations would be disciplinary measures could root set up at various places in the out bribery and other social vices country, including one Sargodha, during the next financial of those evils with a clear consci-

He was replying to a demand put forward at a function arranged by launched a drive for social reforma-Anjuman Faroghe

truction of radio station building in term measures to purge society of Sargodha would start soon after the social evils. fund allocation.

He added that the Government ferent quarters in this regard. was also trying to provide a television unit at every divisional head-mony of the office-bearers of quarters, or at least one unit for two Sargodha Press Club this evening, sidered a TV region. For the time to improve their professional being, he said the Faisalabad TV capabilities Bureau would equally look after standard to be able to discharge news activities in the Sargodha their functions properly. division.

ety could be reformed only through _APP.

No amount of legislation or other at unless society had a will to get rid ence, he remarked.

He said the Government had Nazria-i. tion about seven months back, and Pakistan at the Officers Club here. a high-level committee was set up Raja Zafarul Haq said the cons. to suggest long-term and short-

The committee, he said, had received various proposals from dif-

Speaking at the oath-taking ceredivisions, which would be con-Raja Zafarul Haq asked newsmen

Speaking at a reception held for oath of office to the new office-Raja Zafarul Haq administered him by the Islah-i-Muashra Combearers of the Sargodha Press mittee of the local Anjuman-i- Club. He also presented a set of Tajran, Raja Zafarul Haq said socibooks for the Press Club library.

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

BRIEFS

COLOR TV TRANSMISS10N--Color television transmission will cover Shabwan Governorate as of 22 June. In a statement of ANA, the television general director said that 4 television transmitters with a total capacity of 400 watts will be used for this purpose. [Text] [GF211949 Aden Domestic Service in Arabic 1630 GMT 21 May 83]

COMMUNICATIONS NETWORK—Khartoum, 12 Apr (SUNA)—Transport and Communications Minister Khalid Hasan 'Abbas yesterday reviewed preparations for renovating microwave networks with a delegation from Thompson Company of France which won construction contract. Renovation work is expected to begin May and will be finished in 18 months. The new system of networks will be operated by solar energy instead of oil, SUNA learned. Thompson will also establish an earth satellite station in Port Sudan to facilitate communication with Egypt, Jiddah and Asian states. The two projects will cost 12 million dollars to be covered against a loan rendered by the French government. [Text] [Khartoum SUNA in English No 4458, 12 Apr 83 p 2]

'PANA' TRIAL PERIOD--Dakar, 19 Apr (AFP)--The PAN-AFRICAN NEWS AGENCY (PANA--a specialized organ of the OAU) will begin a trial period of operation in May. According to its director, Cheikh Ousmane Diallo, PANA, set up in 1963, will begin a 3-month trial period in May to master its communications network and to familiarize its newsmen with the objectives of the agency. Mr Diallo, who on Monday opened a meeting of the PANA technical committee in Dakar (headquarters of the agency), stressed that the trial period was a part of his organization's plan, which is being implemented in successive steps. The first steps, he pointed out, involve institutional and telecommunications problems. [Text] [AB191103 Paris AFP in French 0923 GMT 19 Apr 83]

COMMUNICATIONS LINK WITH SPAIN—Madrid, 24 May (EFE)—The "only reliable means of communications" between the capital of Equatorial Guinea and Spain are the EFE teletype service and that of the Spanish Foreign Ministry's office in Malabo, according to Jose Varia Valle, "Radio-Television Espanola" representative in Equatorial Guines. Valle and Fulgencio Biyogo, who is in charge of the EFE office here, today used the teletype in the EFE agency in the Equatorial Guinean capital to send the first direct report received through Spanish communications media since the Guinean coup attempt 10 days ago. The report sent by Valle and Biyogo through EFE was used simultaneously by the EFE agency and the Radio Nacional de Espana news service. Angel Asensio, new EFE representative in Equatorial Guinea, will leave tonight for Malabo. He will replace Fernando Cabrera, whose tour of duty expired last month. [Text] [PA241701 Madrid EFE in Spanish 1626 GMT 24 May 83]

GUYANA

BRIEFS

TELECOM DATA BASE—The Guyana Telecommunication Corporation (GTC) is giving priority to the preparation of a proper data base. GTC General Manager John King explained that a proper data base is essential if the corporation is to equip itself for the role it has to play in the economic and social life of the country. Last month the Guystac In-House Incentives Committee expressed concern about the absence of a data base within the corporation. The absence of such a base, the committee felt, restricted the degree to which GTC can plan and implement a proper work programme for the future. To this effect, the corporation has completed its audited accounts for the year 1976 and 1980. Cde King said that the audited final accounts for 1981 and 1982 will be completed before the end of the year. [Text] [Georgetown GUYANA CHRONICLE in English 27 Apr 83 p 1]

LESOTHO

NEW COMMUNICATIONS SYSTEM TO BE INTRODUCED

MB171900 Maseru Domestic Service in English 1130 GMT 17 May 83

[Text] The Lesotho Telecommunications Corporation, LTC, chief of planning, Mr (Taelo Khabele), has disclosed that the corporation is to install a new telex exchange system for both national and international telex services. Mr (Khabele) said this in a Radio Lesotho broadcast this afternoon to mark the 15th anniversary of the World International Telecommunications day. According to Mr (Khabele), Lesotho is also to introduce a new digital exchange for international telephone services and a standard B satellite F-station antenna which will enable her to have direct access with most countries of the world.

As soon as these services become operational, local subscribers will bypass Maseru telephone operators and be in direct contact with their overseas counterparts. Mr (Khabele) added that as part of the implementation progress, Lesotho has already signed a contract with a Japanese electronic company which will install a new microwave telephone system later this year. This will provide all the major towns of Lesotho with a high quality of capacity transmission systems. The microwave and the combined town's exchanges are expected to be operational late next year or in January 1985 at the latest.

Mr (Khabele) concluded that the 15th World Telecommunications Day is of particular importance as the International Telecommunications Union will become the oldest specialized agency of the United Nations, competent and harmonizing and standardising the telecommunciations systems in member states.

SLOW START FOR FOURTH GENERATION LANGUAGES REPORTED

Johannesburg SUNDAY TIMES-BUSINESS TIMES in English 8 May 83 p 4

[Article by Julian Kraft]

[Text]

FOURTH-generation languages have barely got to first base in South Africa, but they are clearly the way of the future.
That is the message from a

survey undertaken by a re-search team from the Gra-duate School of Business Administration of the University of the Witwatersrand, which examined 11 organisa-tions that have used fourth-generation languages for six months to two years.
Use of these languages

predictably — was not as far advanced as in the US. Also, most users did not use the 4G languages to develop their own systems, nor were they used much outside the data-

processing (DP) department.
On the positive side there are impressive advantages, mostly productivity-related: faster systems development and lower development costs; better user relations and im-proved DP staff motivation as a result of continual contact with user and the ability to produce results sooner; better requirements definition due to greater user in-volvement in early stages and ease of changing specifications; easier system main-tenance; alleviated skills shortage; and speed of implementation.

Respondents were unanimous about the increased productivity achieved, particularly in programming.

One stated that his depart-One stated that his departmental costs had dropped by 50%; another said the language had paid for itself in the first application.

The six fourth-generation languages covered in the survey were: Mapper, SQL/DS, Focus, Aims Plus, Natural and Mantis

and Mantis.

and manus.

In summing up, the survey team, headed by Neil Duffy, professor of management information systems at the Graduate School, stated:

"We have a firm conviction

"We have a firm conviction that what is happening now with fourth-generation languages is the groundswell of a change in computer-based system development at least as radical as the advent of

system development at least as radical as the advent of Cobol or data bases.

"We expect to see a continuing flood of fourth-generation languages, each becoming more sophisticated and efficient and, collectively, having an impact on the computer industry and information systems in organisations that can only be dimly perceived at the present time." time."

CONSORTIUMS COMPETE TO WIN BOP-TV CONTRACT

Johannesburg SUNDAY TIMES-BUSINESS TIMES in English 8 May 83 p 4

[Article by Vera Beljakova]

[Text]

SEVERAL consortiums, including newspaper groups, are competing to try to win the Bophutha-Tswana television (BOP-TV) tender away from Natie Kirsh — the man tipped to win the lucrative deal.

Whoever is the winner, one thing is certain: BOP-TV has no chance of getting off the ground by January 1 1984 — its proclaimed launch date.

Yet the jackpot is worth fighting for: a 30-second advertising spot could well cost R8 000, for the new commercial station can afford to peg itself at a slightly higher rate per 1 000 viewers than SABC TV.

Since this means R70-million in annual revenue once fully booked, it is obvious why hordes of entrepreneurs are racing to claim a stake in the station.

Even though BOP-TV will be beaming to fewer South Africans than SABC TV, it will be concentrating on Rand viewers, who account for 60% of the country's disposable income.

It will also be interesting to see how much time BOP-TV will allocate its advertisers — it will obviously be offering more time to advertising companies than does the Government-controlled SABC.

But it is highly unlikely that the BophuthaTswana government will be able to meet its deadline and get the station on the air by January

Most outspoken on this subject is Bates Wells's mediadirector, Nick Holdsworth, who says: "Specifications for the tender document are still being compiled and are expected to be ready only in June, in which case tenders cannot be submitted before August.

August.

"Allowing for the time needed to study tenders, I can't foresee the successful tenderer being advised until October, by which time it will

be too late for the company to pull together programming in three languages, form rate structures and create a sales team to allow the new station to go on the air by January 1."

to go on the air by January 1."
Because Bophutha Tswana
is not recognised internationally as an independent country, Mr Holdsworth believes
that BOP-TV's programming
will suffer from the Equity
ban that is hitting the SABC
so hard.

"Hopefully, however, BOP-TV will be less affected than the SABC, insofar as the SABC needs to consider the whole of South Africa's population and hence appears to aim at the lowest common denominator.

denominator.
"While it has been announced that BOP-TV will broadcast in Setswana, English and Afrikaans, it must be assumed that daytime transmissions will be largely of an educational nature in Setswana, while evening programmes will give preference to the two other languages."

VTR SALES INCREASE--Despite a poor economic climate, the video-tape-recorder (VTR) industry has experienced a phenomenal growth over the past year--and an even more spectacular sales performance is being forecast for 1983. In five years VTR sales increased by 2 000 percent and are still on the up and up. South Africans bought 80 000 VTRs last year compared with 4 000 units five years ago. This year sales will rise by a further 12,5 percent, predicts TEK Electronic's marketing manager, John Floisand, "which will bring the market to 90 000 units." "In the middle to upper income groups, VTRs have become synonymous with television ownership," says Mr Floisand. "The recording and video playback facilities appear to complement the South African lifestyle." There are now more than 151 000 units in South African homes with the Beta format holding the biggest market share in 1981, but by the end of 1982 VHS units had increased their market share considerably. The trend is definitely towards the VHS, which leads TEK to assume that South Africa will follow the international buying pattern and opt mainly for VHS units--now the world's best-sellers. "VHS will dominate the local market as it does world-wide, where 60-70 percent of all units now sold are VHS," he "Although our Telefunken and Pioneer brands have always held the lion's share of the home-entertainment market, we watched from the sidelines as the VTR market started developing in 1979. "We then decided to opt for the Telefunken VHS range in 1981, when the annual VTR sales leapt from 10 000 to 50 000." [Text] [Johannesburg SUNDAY TIMES-BUSINESS TIMES in English 8 May 83 p 8]

COMPUTERIZED SEISMIC RESEARCH—Anglo American Corporation has spent nearly R500 000 on new and upgraded facilities to improve its seismic research programme on the Orange Free State gold fields. The OFS seismic project, based in Welkom, has installed additional computer equipment which analyses and interprets information recorded by 26 highly sensitive geophones installed in shaft pillars on the mines plus an additional six located on surface. The geophones pick up seismic activity and transmit information to underground microcomputers which monitor and record it. The information is then fed via cable and radio links from the micro-computers to a surface micro-computer for analysis and interpretation. "The system is called Diginet and in using it we are able to obtain data on seismic events in the quickest possible time. This information is used by the Rock Mechanics Services Sections to identify seismically active areas," says Dr Stan Patchet, head of Rock Mechanics. The first underground unit was installed

in June last year at Free State Geduld's No 1 shaft and 32 units will shortly be in operation on the Free State mines administered by Anglo American Corporation. Dr Patchet says the department is looking at the possibility of developing the system to link up with other seismic research projects at Vaal Reefs, Western Deep Levels and Elandsrand. He says the department, in conjunction with the Chamber or Mines, is working on a project at Western Deep Levels gold mine, near Carletonville, aimed at predicting rockbursts. One of the main aims of the 20 department members involved in seismic research is to establish whether rockbursts are predictable. "We can't yet tell a mine manager that a rockburst is about to occur but this is our goal." [Text] [Johannesburg THE STAR in English 11 May 83 p 10M]

COMPUTERIZED POLLUTION CONTROL—A GAAST (Fluid Analysis and Simulation Technique) Computer-designed pollution control system by Cybernet Data Services, costing R2,25 million, is being installed at the Richards Bay coal terminal. The system comprises 350 water cannons sited at intervals along the perimeter of the stockpiles at the terminal, which wet the coal at set intervals to prevent coal-dust air pollution. The analysis of the reticulation system was a complicated exercise, according to Mr Tony Allinson of Webb and Partners, the project engineers. The programme allows the modelling of pumps and sprinklers. [Text] [Johannesburg THE STAR in English 11 May 83 p 10M]

COMPUTERS THREATEN WOMEN'S JOBS—A warning that women workers face losing their jobs because of the overall economic situation and the growth of the computer era was made yesterday at a meeting of the SA Association of Industrial Editors at White River. Mr Roy Williams, of the University of South Africa's Communications Department, said women were going to be hardest hit in the worsening employment situation. In addition, the development of micro-electronics in the 1980's would disproportionately affect those in White occupations, just as factory automation in the 1950's and 1960's hit male blue—collar workers. The computer era would have a serious effect on employers doing routine jobs as their tasks would soon be taken over by electronic apparatus. [as published] In this specific field, women as typists, clerks and other administrative jobs would be affected. Also, people in lower management jobs could also become redundant as a result of automation. [Text] [Johannesburg THE CITIZEN in English 10 May 83 p 10]